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ABSTRACT

A preliminary analysis of information collected from historical archives and long-time leaders in gifted education reveals a wealth of data about five women researchers who worked in various capacities during the initial establishment and data collection of Dr. Lewis Terman's classic longitudinal study of the "Genetic Studies of Genius." The five women included Florence Fuller, Helen Marshall, Dorothy Hazelton Yates, Florence Goodenough, and Catharine Morris Cox (Miles). The published and unpublished papers, memoranda, and research field notes of these researchers, their respective correspondence with Terman and each other, and some contacts with a living member of the research team and some of these women's family members were used for this analysis. Although the information is still sketchy on one of the five, most of them appear to have had satisfying personal lives in addition to satisfying professional careers. All contributed greatly to the actual work of carrying out Terman's research conception, but they also represent a continuum of lifelong productivity. Personal responsibilities may have had more to do with their subsequent levels of productivity than "zeitgeist." (Contains 2 tables and 14 references.) (Author/SLD)

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ED 410 238

Running Head: TERMAN'S WOMEN

The Lifelong Productivity of Terman's Original Women Researchers

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Abstract

A preliminary analysis of information collected from historical archives and long-time leaders in gifted education reveals a wealth of data about five women researchers who worked in various capacities during the initial establishment and data collection of Dr. Lewis Terman's classic longitudinal study of the "Genetic Studies of Genius." The five women included Florence Fuller, Helen Marshall, Dorothy Hazelton Yates, Florence Goodenough, and Catharine Morris Cox (Miles). The published and unpublished papers, memoranda, and research field notes of these researchers, their respective correspondence with Terman and each other, and some contacts with a living member of the research team and some of these women's family members were used for this analysis. Although the information is still sketchy on one of these five women, most of them appeared to have had satisfying personal lives in addition to satisfying professional careers. All contributed greatly to the actual work of carrying out Terman's research conception, but represent a continuum of lifelong productivity. Personal responsibilities may have had more to do with their subsequent levels of productivity than *zeitgeist*.

The Lifelong Productivity of Terman's Original Women Researchers

During the summer of 1921, Dr. Lewis Terman and Dr. Maud Merrill began training the women research assistants who would conduct Terman's study of "genetic genius." By this time, however, much effort had gone into selecting the "right" people for the job. Terman had made personal visits to his respected colleagues at Columbia, University of Minnesota, University of Ohio, Yale, and other top schools with a focus on finding experienced testers, preferably women, who were "gifted," themselves. Because they were women, Terman believed, they would have better rapport with the children and parents who were to become the focus of his study. And perhaps because these women would be dealing with very bright individuals and their bright parents, he insisted on obtaining IQ scores on each of his prospective candidates.

Five women were ultimately selected as the major research associates for his study: Florence Fuller (1886-1960), Helen Marshall (1893-1968), Dorothy Hazelton Yates (1888-1960), Florence Goodenough (1886-1959), and Catharine Morris Cox Miles (1890-1984). From Terman's correspondence with these women, which continued until his death in 1957, and from their correspondence with each other, both before and after his death, much has been learned about the subsequent personal lives of these remarkable women. Little, however, has been reported, even in the obituaries of their deaths, about their lifelong productivity in the professional sense. For example, Robert Sears (1984) in his obituary on the death of Catharine Cox Miles, spent more "words" on her religious activities, her husband's productivity, and her family responsibilities than on her own professional productivity.

The first years of the study, which continues to this day, were highly productive for both Terman and his research associates, but did the productivity that marked Terman's own career after those early years also prove true for these fieldworkers? Did

they go on to make great contributions to the fields of education and educational psychology once their work with Terman ended? One might hypothesize that the *zeitgeist* of the 1920s countered their attempts toward professional productivity. Boring, for one, wrote much about the lack of research vigor among women psychologists, an acceptable topic of discussion during the earlier decades of the century (1950). Furthermore, much has been written of Terman's own "chauvinist" tendencies (Shurkin, 1992; Minton, 1988; Seagoe, 1975). Could he have mitigated their attempts to establish careers in their own right?

Considerable interest has been shown of late in the development of adult women's talents (for example, Tomlinson-Keasey, 1992; Holahan & Sears, 1994; Silverman, 1995; Miller & Kastberg, 1995; Subotnik & Arnold, 1995; Reis, 1995). A recent issue of *Roeper Review* devoted an entire issue to this phenomenon, providing a very balanced focus on gifted adult women's eminence or productivity and on specific women with eminent histories. The three editors of this issue described the dilemmas that impact gifted women's achievement and productivity and took careful note of the gaps in the recent explosion of research about women, including isolation of the factors that inhibit or enhance the development of their abilities and talents. Is there a benefit in pursuing this line of research? My answer would have to be "yes." In isolating the life events or catalysts that may have influenced the productivity of one group of women researchers in educational psychology, it should be possible to provide support for modern-day women in the fields of educational psychology, education, and in the behavioral and social sciences in meeting both familial and professional demands. Most scholars in the field now believe that women in research may use different times ("tracks") in their lives to pursue professional aims and familial demands. As a result

of this study, we may find that the two tracks must be pursued sequentially, unless there is a facilitating catalyst.

Much has also been written about the lack of correlation between high intelligence and ultimate career success. Recently, Goleman (1995) has argued that the intelligence that gets one "ahead" is more emotional (social) in nature. Did these women use their social/emotional intelligence --that ability to interact well with others --to move forward professionally? Did the intellectual gifts they each possessed work against them when considering their professional "success"? Did these women "do their job" with Terman and then go on to lead the traditional lives expected of them, or did they step out into the then masculine world of educational psychology and demand their own recognition?

This study surveys the productivity of one group of women researchers in educational psychology from the beginning of their research assistance in the Terman Study to the time of their deaths. Through their various archives and interviews with their family members, it was hoped to discover what life events influenced their subsequent productivity or lack of it. Were they able to maintain stable family relationships and friendships, in addition to maintaining their professional lives? What were the catalysts that impacted their ultimate professional careers and research directions? The purposes of this study, therefore, were to answer the questions posed in this theoretical framework:

1. To trace the professional productivity of Florence Fuller, Florence Goodenough, Helen Marshall, Catharine Cox Miles, and Dorothy Hazelton Yates from Terman's study to the times of their deaths; and

2. To trace the personal lives of these five women.

METHOD

A preliminary list of women researchers given credit for their contributions to the Terman study was compiled from a review of the multiple volumes of *Genetic Studies of Genius*. These names were then targeted during a search of Lewis Terman's archives, housed in Green Library at Stanford University. A careful reading of Terman's correspondence with these women, along with his remarks to colleagues about other researchers who had contributed to his work produced a final list of 31 women assistants. The correspondence these women conducted with Terman, many throughout their lives, along with searches of Cattell's *American Men (and Women) of Science*, the *Social Science Citation Index* , *Science Citation Index*, *American Women of Psychology*, *The Women of Psychology* (Stevens & Gardner, 1982), and obituaries appearing in *American Psychologist*, and *Gifted Child Quarterly*, provided at least minimal information on each woman. The data were categorized by date of birth, date of death, marital/family status, educational background, years in Terman Study, roles in Terman Study, career highlights, contributions to psychology/educational psychology, education, organizational memberships, and honors received.

For this study, the women were sorted by the size of their contributions to the initial Terman study. Those women who were involved in subsidiary roles in the initial 1921-1922 period were eliminated (for further study in the future), but included Beatrice Lantz, Elizabeth Kellam, Bessie Fuller, Elise Martens, Ida May Lima (Norgaard), Jennie Benson Wyman (Pilcher), Maud Merrill (James), Lulu Stedman, Edith Bronson, Beth Lucy Wellman, Alta Williams, Jessie Chase Fenton, Lela Gillan, and Ruth Gaines Livesay. The remainder of the 31 assistants worked in the follow-up years of the study (and will be analyzed in the near future).

A content analysis of the books, articles, papers, and biographical entries of the five initial fieldworkers was conducted, searching for evidence of their professional productivity, areas of emphasis, and statements of belief that might contribute to an understanding of their work "ethic." These data sources were available in the Stanford University Archives in Palo Alto, California, the Yale University Library in New Haven, Connecticut, and the University of Akron Archives of the History of American Psychology in Akron, Ohio.

Similarly, a content analysis was undertaken of the women's field notes, journals and from their personal correspondences with Terman, each other, other Terman research associates and other educational psychologists of the times, searching for themes and statements of belief that might contribute to an understanding of both their work and personal "ethic." Their personal correspondence with Terman was found in the Terman Archives at Green Library at Stanford University and at the Archives of the History of American Psychology at the University of Akron in Ohio. Personal journals, tape recordings of Helen Marshall reading from her journal written in 1921-1922, transcripts of oral interviews and written commentaries conducted by May Seagoe with some of these women as she prepared her biography of Terman were also found at the Ohio Archives and used as a part of this analysis. Catharine Cox Miles' complete archives were located in Ohio.

Conclusions drawn from these two analyses were triangulated. Timelines were developed tracing the professional productivity of each woman from the evidence available. Conclusions were then drawn about the forces that enhanced or hindered their subsequent professional productivity.

RESULTS

Tables 1 and 2 summarize the data thus far collected on the five women psychologists who played major roles in the initial 2 years of the Terman study. From this table, several interesting patterns can be discerned:

1. The three research associates who contributed to more than one follow-up in this study (Goodenough, Marshall, Miles) tended to be recognized by Terman initially as the more gifted individuals.

Each of these three went on to have highly productive careers and lines of research that diverged from Terman's own interests (See Table 2). All were ultimately listed several times in Cattell's *American Men (and Women) of Science*. Both Goodenough and Miles received numerous honors and recognition for their "contributions to science" during their lifetimes and were actively involved in the primary national research and psychology organizations of their day. These two women seemed to have greater confidence in their own abilities, judging from their self-descriptions; Marshall, although described as equally bright, tended to deprecate her own ability and ambition.

2. These five women represent a continuum of professional productivity, ranging from "above average" for Florence Fuller and Dorothy Hazelton Yates, to "superior" for Helen Marshall and Catharine Cox Miles, to "supreme" for Florence Goodenough.

Both Fuller and Yates remained in California after their participation in the project (1 year each) and worked full-time for the remainder of their lives. Both were responsible for supporting other family members without the help of a husband: Yates raised a son and Fuller supported her mother and sister. Fuller held administrative positions in research and evaluation in Los Angeles County Schools, spending her final

years in teaching mathematics. Yates was a professor of psychology at San Jose State University, eventually becoming a consulting psychologist and writing several books on pop psychology. Marshall never married and was the only field worker to participate with Terman on every follow-up effort. She finished her own doctorate in 1947, retiring from a successful career in higher education administration at Utah State University, ultimately taking over Terman's study office upon her retirement and remaining there until shortly before her own death in 1963. Miles, a devout Quaker from California, married widower, Professor Walter Miles, a renown psychologist, shortly after completing her own doctorate in the late 1920s, raising his children and producing one of her own with him. The two moved into professional appointments at Yale University where they remained until their retirements. Goodenough, who never married but was known as a "doting aunt" of many nieces and nephews, moved to the University of Minnesota's Child Development Institute, where she was highly productive in the field of assessment and child study until her retirement. She continued to write textbooks and research articles right up to the time of her death in 1959.

3. The personal traits, work ethic, and energy levels may have contributed greatly to their professional productivity, both during participation in the Terman Study and in subsequent research and professional activity.

Helen Marshall was described to Terman by her graduate advisor at Ohio as a reader of people and situations, clear thinking, ambitious, and a strong worker with a sense of humor. She was rated as "highly intelligent" with absolutely top scores on the battery of test scores reported to Terman. Her personality comes through from her first letter to Terman and continued to be a strong part of her participation in the study. Tapes of her reading her own journal of the first year of the study document her "reading" of her colleagues in the study, described with wit and a dose of realism. She quickly

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realized the importance of Terman's work and developed a very personal and lifelong friendship with him. Her own professional productivity, although moderately high in later years, was probably dampened by her continuing involvement in the Terman study. For example, she did not finish her own doctorate until 1947, took leaves of absence from her position at University of Utah, and took peripheral jobs, sometimes described by Terman as "dead end," in the Palo Alto area for several years before completing the doctorate. She was one of the three brightest associates to join the Terman Study, but fared not so brightly as Miles and Goodenough in productivity, perhaps because she was not able to establish her independence from Terman himself and his study. She is the only one of the initial five associates who returned to work on every follow-up of the study and helped to keep the study active after Terman's death, leaving his study office for good only months before her own death.

Florence Fuller's advisor, Dean Hagerty, at the University of Minnesota, described her as good with children and adults, very experienced in school matters, intelligent (but not in the top 5%), conscientious, but "less independent" in her thinking. He also reported her scores on a battery of intelligence tests. Terman felt her experiences and personality would ultimately make up for the lesser levels of giftedness, because of her quick grasp of what would be needed in a research study. She had been working on a similar project with Hagerty. In her subsequent correspondence with Terman before coming West, Fuller identifies for Terman the areas of testing where she needs more work, appearing to be fully aware of her own capabilities and skills. Her conscientiousness was in evidence in the study, when half-way through the year she expressed her concerns to Terman that their method of identification was missing a large number of children, particularly those for whom a foreign language was spoken in the home. Some quick remedies were put in place by Terman after her letter of concern

(translations of test, testing a whole school's children to see if different proportions were identified, etc.) She remained a careful and conscientious worker during her one year in the study, but remained fairly formal with Terman throughout her participation. Fuller was not asked back for the second year of the study, primarily because she was then supporting her mother and sister, Bessie. She took a job in teaching in the Los Angeles County schools, ultimately working herself to the position of Research and Evaluation Director within the system. Judging from her comments during the year in the study, Florence Fuller was very interested in the children themselves, rather than the more general outcomes of the study. Her decision to go back into the schools may have been influenced by this interest as well as by her strong need for steady, better paying employment so that she could support her mother.

Florence Goodenough was described by her advisor at Columbia (Leta Hollingworth) as rigorous and exacting, human and humane, always setting high standards, unfailingly patient and helpful, "razor sharp," with a pixie-like sense of humor. She got off on the wrong foot with Helen Marshall, who felt she did too much talking and socializing. It is evident that Terman recognized her abilities immediately: she was put in charge of the Los Angeles site, designated chief data analyst for the study, and treated by Terman almost as an equal from the very first. He prevailed on her to stay around until 1924 at which time she finished her doctorate with him. Their beginning relationship did not appear to be auspicious. She was insistent that with her energy levels she could work full-time on the project with him and take coursework to complete her doctorate at the same time. Terman told her this would be impossible. She gave in and came to work on the project anyway, but perhaps just in case she wanted to prove her point, Terman assigned her to the Los Angeles area, making it impossible for her to take coursework at Stanford. There is no dispute that after receiving her doctorate she made

up for lost time when she took a position with the Child Development Institute at the University of Minnesota. In the brief 23 years before she was forced to retire due to ill health, she contributed to two volumes of Terman's "Genetic Studies of Genius," writing major sections of them, wrote nine books (including second and third editions of several of them), 26 scientific articles, several alternative tests of intelligence, and numerous publications for the popular market and remained heavily involved in research and teaching. She was noted to have been more demanding of female students than male students, and most of her more brilliant protégés were women. She was not affiliated with the feminist movement, and although she was a member of the National Council of Women Psychologists, Goodenough did not want to be identified as a woman psychologist. When the Council honored Goodenough with an award, she at first decided to refuse, because, she insisted, "I am a psychologist, not a woman psychologist." Goodenough ultimately was "starred" as one of the top 50 "American Men of Science," an honor that made Terman very proud. In his own correspondence to Boring, he described Florence Goodenough as as good as any man psychologist, high praise indeed from a presumed chauvinist. Goodenough and Terman corresponded almost monthly until his death in 1957, treating each other as equals and dear friends.

Catharine Morris Cox Miles was the second youngest associate to work in the Terman study, but her role was distinctly different from the other associates'. Her association with other professors at Stanford was long-term, since all of her degrees were awarded there. She was described as intense, independent, studious, conscientious, and religious. Her focus was on trying to apply Stanford-Binet intelligence levels to Sir Francis Galton's list of eminent producers by studying the biographies of these men and looking at their levels of productivity at various ages. Within Terman's study, she was given her own assistant to do this research, maintained her own office independent of

Terman's own, was given sole credit for Volume Two of "Genetic Studies of Genius," and was allowed to let this work become her dissertation simultaneously. Whereas Terman would not allow this for Florence Goodenough, it was allowed for Catharine Morris Cox (Miles). Although Terman only intimated it in his correspondence with others, there may have been a stubbornness present in Miles that not even Terman could fight against. Even after she married and left Stanford with her husband to take up a position at Yale University, Terman continued to work in parallel with her on a variety of topics tangentially related to the study. The final rift between them occurred when she delayed publication of their joint results during a time when he was ill. There is evidence of strong words spoken, with Walter Miles coming to the defense of his wife, and a lessening of correspondence between the two families at that point. Catharine Cox Miles was a prolific researcher and writer after leaving Stanford, but in widely divergent ways from her work there. (Her archives contain approximately 3,000 pounds of materials!) With her family responsibilities, a full psychiatric clientele at Yale in addition to administrative responsibilities, she did not correspond regularly with Terman, but there is no doubt that Terman continued to admire her capabilities. He asked about her frequently when he wrote to other colleagues on the East Coast and praised her abilities to Boring, among others, as one of the top American psychologists of the time.

Dorothy Hazelton Yates was described to Terman by her advisors at Berkeley in somewhat contradictory terms, and yet these contradictions may have contributed to what she ultimately did with her career. She is described as physically strong and healthy, dependable and conscientious as a data collector, with high ability, good personality and tact, a calm demeanor, and wonderful social skills. One of her advisors expressed concerns that she made "snap judgments" but lacked the depth to be an insightful researcher. She was described as "school marmish," but extremely

observant. As one of her references noted, she was observant and original up to a point, but not beyond. For her dissertation, Yates had conducted intelligence testing and home visits in the Oakland Bay Area (similar to what Terman wished to do) and it was reported that she was granted entry to every home and that many of the subjects continued to come to her for advice and suggestions after her study was completed. One of the advisors who gave her a less than favorable review called her "opinionated, but will follow instructions if you insist." Despite these contradictions Terman hired her, but when she asked for more pay and a promotion in title for the second year, he turned her down and she left to become a professor at San Jose State University. Her productivity from that point on tended more toward popular psychology. She wrote three books with fairly wide appeal on fraudulent practices in, basic psychology for the lay person, and on taking control of one's life through hypnosis and self-talk. She continued to correspond with Terman sporadically, usually when she wanted his advice about some project she was applying for, but their relationship was an unequal one. She still looked to him as a mentor or someone who could facilitate her career, and he saw himself in the same way.

4. The personal or family relationships of these five research associates differed significantly from those of women of the time.

Three of these research associates remained single throughout their lives, and the two who did marry (Yates, Miles) married considerably later than the "fashion" of their day. All five were single (Yates was divorced with a son) when they came to the Terman study, and most had already been working in educational settings for many years. Their ages at the beginning of the study ranged from 28-35 years of age. Although there are no personal commentaries on the subject, most may have already decided that they would remain single but professionally productive. For Catharine Cox Miles, the one associate who eventually married, a nontraditional household was created. She had full-

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time staff for child care, household management, housework, chauffeuring, and so forth. Although the evidence is clear that both she and her husband jointly parented their four children, neither engaged actively in other household tasks.

The issue of personal relationships was of importance to all five research associates. Florence Goodenough was a doting aunt who practically raised one of her many nieces. In her later years she shared a home in New Hampshire with her sister and husband. Dorothy Yates raised her son alone and appeared to maintain a close relationship with him. Florence Fuller maintained a home for her mother and sister throughout her life and was the main financial support of her mother. The only one who did not stay closely attached to family appears to be Helen Marshall, but in her many letters to Terman and other research associates across the years, it is clear that she considered Anna and Lewis Terman and their two children her "family." She stayed with them frequently and celebrated many family events with them. It was to Palo Alto she made her "family" visits after she moved from the area. Hence, although the personal relationships of these five women were far from traditional, there is no evidence to say that they were forced to give up having a personal life to continue in their professional ones.

5. Most of the research associates acquired Ph.D.s either before or after completing their first participation in the Terman Study and, therefore, were early into their own careers when they joined the Terman Study.

In fact, participation in the study may have been considered a stepping stone for many of them to their future careers. The one exception was Helen Marshall, who did not complete her doctorate until 1947, some 26 years after beginning work in the study. Terman's hand in moving these women along in their careers was evident, although his efforts on their behalf were not so overt as for many of the male protégés he engaged

over the years. He advised them and wrote letters of recommendation for them when asked, but did not actively ask his colleagues to find positions for them, which he did for many of the men. These women tended to find their own jobs and then do well in them. There is no question that their association with Terman was helpful in acquiring a position, but all efforts to get the job seemed to fall on their own shoulders. The only associate who was actively placed in positions by Terman was Helen Marshall.

6. Most of the research associates were very active in the American Psychological Association (at a time when one had to be "voted" in), the Society for Research on Child Development, and the Women's Psychological Association. They seemed to create a professional network among themselves, as well as maintaining personal connections with others who had worked with Terman. Only Florence Fuller does not appear to have stayed actively involved in the more national arena of psychological research.

DISCUSSION

Although the data thus far collected do not fully delineate the lives and catalyzing events that shaped these women researchers' ultimate productivity, ample sources of evidence were found which promise to answer the questions posed in the introduction of this paper. It seems clear that as additional materials are analyzed and interpreted, especially as the details of everyday life are revealed for these women, there should be a clear picture of how their lives evolved, what hindered them and what moved them forward. At this point in the analysis, however, it seems clear that their life "tracks" were pursued sequentially, rather than simultaneously, except for Miles who married a college professor. For most, the home or personal track came later or not at all. Further investigation is needed, however, to substantiate this first set of impressions.

In drawing conclusions across the five case studies, one can say that *zeitgeist* did not play a large role in these women's subsequent productivity, but personal

responsibilities may have had an impact. Four of the five were listed in Cattell's "American Men of Science" for several volumes; most were active in state and national divisions of the American Educational Research Association, the American Psychological Association, and the Society for Research on Child Development. They received awards, accolades, research grants, were active consultants, traveled broadly, and were widely respected and recognized. They did manage to do well professionally, despite the tenor of the times. Their personal circumstances were also nontraditional. Only one married successfully and raised children in a two-parent home, albeit with a "blended" family. Three never married and one never remarried (Yates). One might conclude that they were "allowed" to become professional because there were few traditional expectations for marriage and family placed on them.

Much still needs to be analyzed concerning these five women and their lives. In particular, initial impressions of Catharine Cox Miles and Helen Marshall may change as more of their correspondence comes to light. Of the 3,000 pounds of material on Miles alone, only a fifth of them have been surveyed, and new locations of materials collected on Marshall have been located at two additional universities. Likewise, Fuller's life story is far from complete. A search within the Los Angeles school system will be necessary before her history can be fully validated.

What occurred with the lives and productivity of these five women must have implications for women in education and psychology today, despite the comparative ease in the past two decades for lifelong professional productivity. Much can also be discovered about the man, Terman, from the perspective of his continued relationships with these women. He did not abandon them to their fates, but continued to remain interested in them, encouraged them, and in some cases, advised them in professional matters until his death in 1957. Those he more actively mentored (Goodenough, Miles,

Marshall) were successful and those he relatively "ignored" (Yates, Fuller) were less so. His "mentorship" may ultimately be the strongest conclusion to be drawn about influences on the continued productivity of these women.

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References

Holahan, C.K., & Sears, R.R. (in association with L.J. Cronbach) (1995). The gifted group in later maturity. Stanford, CA: Stanford University Press.

Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. NY: Bantam Books.

Miller, D.G., & Kastberg, S.M. (1995). Of blue collars and ivory towers. Roeper Review, 18, 27-32.

Minton, H.L. (1988). Terman: Pioneer in psychological testing. NY: University Press.

Reis, S.M. (1995). Older women's reflection on eminence: Obstacles and opportunities. Roeper Review, 18, 66-72.

Seagoe, V.M. (1975). Terman and the gifted. Los Altos, CA: William Kaufmann.

Shurkin, J.N. (1992). Terman's Kids: The groundbreaking study of how the gifted grew up. Boston, MA: Little, Brown and Company.

Silverman, L. K. (1995). Why are there so few eminent women? Roeper Review, 18, 5-13.

Stevens, G., & Gardner, S. (1982). The women of psychology. Cambridge, MA: Shenkman Publishing Co.

Subotnik, R.F. (1995). Gifted is as gifted does but what does gifted do? Roeper Review, 18, 4-5.

Subotnik, R.F., & Arnold, K.D. (1995). Passing through the gates: Career establishment of talented women scientists. Roeper Review, 18, 55-60.

Terman, L.M. (1925). Genetic studies of genius: Vol. 1. Mental and physical traits of a thousand gifted children. Stanford, CA: Stanford University Press.

BEST COPY AVAILABLE

Terman, L.M., & Oden, M.H. (1959). Genetic studies of genius: Vol. 5. The gifted group at mid-life. Stanford, CA: Stanford University Press.

Tomlinson-Keasey, C., & Blurton, E.U. (1992). Gifted women's lives: Aspirations, achievements, and personal adjustment. In J. Carlson (Ed.) Cognition and educational practice: An international perspective (pp.151-176). Greenwich, CT: JAI Press.

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Table 1.

Personal Data and Study Responsibilities of Terman's Initial Research Associates

Name	Born	Died	Marital Status	Education	Years with Study	Role in Terman Study
Florence Fuller	1886 ??WI	1960? Los Angeles, CA	single; lived with sister, mother	BS U of WI'09 MA U of MN '21	1921-1922	Field Worker IQ Testing L.A. Schools
Florence Goodenough "Goodie"	1886 Honesdale, PA	1959 Lisbon, NH	single; a "doting aunt"	Bped. PA Normal Sch. BS Columbia 1921 PhD Stanford '24 (Terman)	1921-1924 Summers, '28, '39, '40, '41	Field Worker IQ Testing Co-Author Vol. 1 Chief Supv. of Study '22-'24 Statistics
Helen M. Marshall	1893 Port Clinton, OH	1968 Palo Alto, CA	single	BA Lake Erie Coll. 1913 MA OSU '18 PhD Stanford '47 (Terman)	1921-'24 '27-'28, '38-'40, '50-'51, '59-'62.	Field Worker, IQ Testing Co-author of several articles on T. Study; maintained T. study office with Oden until '67
Catharine Morris Cox Miles	1890 San Jose, CA	1984 Sandy Springs, MD	m. 1927 Walter R. Miles; had 3 stepchildren and 1 natural child by Miles	BA Stan. '11 MA Stan. '13 PhD Stan. '25	1921-'24 1927-'32	Biography Analysis; author of Vol. 2; M-F Test developer; sex diff. analysis in T. sample; Co-author Vol. 3
Dorothy Maud Hazeltine Yates	1888 Morristown, NJ	1960? Menlo Park, CA	m. 1914 (div. 1917); 1 son	BA Wellesley '10 MA UCB '19 PhD UCB '21	1920-1921	IQ testing, field worker Bay Area

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Table 2. Professional Characteristics of Terman Research Associates

NAME	CAREER HIGHLIGHTS	CONTRIBUTIONS TO PSYCHOLOGY	ORGANIZATIONAL MEMBERSHIPS	HONORS
Florence D. Fuller	High school teacher for 15 years before T. study; taught Ellensburg State College (WA) 1923-1926; Supervisor of Ed. Research in D. of Psych, L.A. County Schools, 1926-1947; Junior high math teacher 1948-retirement	Los Angeles County Schools curriculum specialist, test administration		
Florence Laura Goodenough "Goodie"	Teacher '08-'21 Institute of Child Welfare at U. of M. '24-'47 (retirement); Professor Emeritus '47-'59	Developed *Goodenough Draw-A-Man, Minnesota Preschool Scale* tests; published 9 textbooks, 26 research studies, numerous popular articles; wrote *Handbook of Child Psychology*	Soc. for Res. on Child Dev. (Pres. '46-'48); APA Div. 7 Sec.; NCWP Pres. '42; MPA; APA Fellow	Listed Cattell, v. 4-9 (starred 6-7); NCWP honors; biographies written about her (3); listed in *Who's Who of American Women*
Helen M. Marshall	9 full-time years of work on Terman Study; only researcher involved in ALL follow-ups until 1970; instructor SF Medical School '27-'34; instructor Antioch College '34-'38; instructor to full professor U. of Utah '39-"59 retirement; assisted Merrill in 1960 S-B revis.; SU Res. Assoc. '59-'62	Researched factors contributing to marital success; alcoholism; giftedness in maturity	APA, Sigma Xi	Listed in Cattell, v. 8-10; listed in *Who's Who of American Women*

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Catharine Morris Cox Miles	Professor of German at College of Pacific until 1920; Chief of Psychol. Services, Clinical Prof. of Psychology in Dept of Psychiatry at Yale '32-'53; retired as full professor; taught U of Istanbul '53-'56	Wrote V. 2 of *Genetic Studies of Genius*; developed *Attitude-Interest Analysis* Test; wrote several books, chapters on sex differences; wrote articles on behavior therapy, behavior, deviation, personality measurement	APA, AACP	Listed in Cattell, v. 5-10; listed in *Who's Who of American Women*
Dorothy Maud Hazeltine Yates	Instructor to Associate Professor San Jose State Univer. '22-'47; Consulting psychologist '32-death	Wrote popular books on psychology, including safe driving, maturity and old age, psychotechniques for aviators, child rearing techniques and an *Encyclopedia of Psychology*	APA Fellow, AERA, Academy of Politics and Soc. Sciences; WPA, Calif. Educ. Res. Assoc (V. Pres.)	Listed in Cattell, v. 5-8

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